

REMARKS

Paragraph 1 of the Office Action rejects all pending claims as failing to comply with the written description requirement. The examiner states that the specification never discloses that the microstructure is moveable toward the passivation layer as claimed in claims 1 and 13. The examiner's attention is directed to page 6, line 10 of the specification as originally filed which states:

“The applied biased voltage establishes an electronic force on the beam 25 that bends the beam 25 relative to the bottom electrode 115, thereby varying the gap between the beam 25 and the bottom electrode 115. This in turn varies the capacitance of the MEMs capacitor. The passivation layer 20 overlying the bottom electrode 115 is patterned into a plurality of spaced protuberances 40 to alleviate stiction, e.g., “in use” stiction associated with electrostatic pull down of the beam 25.”

Similarly, page 7, line 2 and following describes the motion of the upper beam towards the protuberances 40. Applicants respectfully request withdrawal of this rejection.

Paragraph 2 of the Office Action rejects independent claims 1 and 13 as being indefinite in the use of the term “mesh”. The term “mesh” may be well understood from the specification. For example, Figures 3D, 3E and 3F all describe a structure expressly identified as a “mesh”. As stated in both the Brief Description of the Drawings (page 4, lines 12-14) and in the Detailed Description (page 6, line 16 through page 7, line 9) the use of the term “mesh” is used extensively to identify the square mesh structure of Fig. 3D, the square mesh structure of Fig. 3E and the checkered board mesh structure of Fig. 3F. (See, page 7, line 4 and 5). Applicants would respectfully request withdrawal of this rejection in light of the express teaching in the specification as originally filed.

Paragraphs 3 and 4 reject certain of the claims as anticipated over Volant et al. While Applicant reserves its right to swear behind Volant et al. in future prosecution, Applicant elects herein to claim the capacitive structure now recited in independent claims 1 and 13. Specifically, the claims are now directed to a MEMs based capacitor structure having a substrate, the substrate having an upper substantially parallel surface, a bottom plate, such as a plate which would form one plate of the subject capacitor, the bottom plate being substantially planar with and supported by the upper surface of the substrate, the plate being substantially continuous, and a passivation layer disposed above the plate.

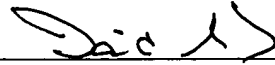
In contrast, Volant et al. describe a much more complicated and different structure. Volant et al., such as in Fig. 5, shows a structure in which wiring 40, 50 provides for electrical conduction in a direction generally parallel to the direction of motion of the actuator. No bottom plate meeting the limitations of the independent claims, such as being substantially planar and supported by the upper surface of the substrate, and that the plate being substantially continuous, is disclosed. Further, the dielectric 20 in Fig. 5 of Volant is not disposed above the conductive structure (even setting aside the issue of the wire not being a plate). Applicant's structure is markedly distinct from the claims. Applicants' structure provides for ease of manufacture of a MEMs capacitive system. The fair reading of Volant et al. is that the conductive structures such as 40 and 50 in Fig. 5 are electrically conductive structures formed as vias or wires, and as such, it can be plainly seen that the intervening insulation between adjacent conductive structures, e.g., the insulator between 40 and 50, is disposed *between* and not *above* the conductive structure as disclosed and claimed in Applicants' application. Accordingly, there is simply no fair teaching or suggestion of the invention as claimed, and accordingly, Volant et al. neither anticipates nor renders obvious the claims as presented.

Applicant requests that the undersigned be contacted by telephone in the event that any matters remain for resolution.

Respectfully submitted,

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